



Cold Chain Assessment

Guidelines for maintaining and managing the vaccine cold chain have been published by the Centers for Disease Control and Prevention (CDC) in *Morbidity and Mortality Weekly Report* (MMWR) 2003;52(42) October 24:1023-1024, www.cdc.gov/mmwr/preview/mmwrhtml/mm5242a6.htm. Further Army Medical Department policy guidance can be found in MEDCOM Operations Management Bulletin No. 01-05 (24 FEB 05), entitled "Monitoring Temperatures on Refrigerator/Freezer Units Storing Temperature Sensitive Medical Products." Key good practices identified to ensure vaccine potency are:

- Detailed written standard operating procedures (SOPs) in place
- A primary and back-up person assigned as responsible for vaccine storage and handling
- Accurate thermometers placed in all refrigerators and freezers
- Manual temperature checks performed twice daily regardless of alarm systems
- Audible alarms installed if possible
- Stock is split to avoid loss of all vaccine in an equipment or power failure
- Contingency plans detail the transport of vaccines to back-up locations in an emergency
- Procedures documented for performing routine equipment maintenance
- A current list of points of contact (POCs) regarding power outages and repair services is maintained
- Periodic training in cold chain management provided to immunization clinic, laboratory, pharmacy, and medical logistics personnel. Cold chain training is available via CD-ROM or online at www.usamma.army.mil/vaccines/ccm/cold_chain_management.cfm
- Personnel aware of POCs at USAMMA DOC who are available to field vaccine cold chain related questions: (301)619-4318/3017/7913/4128/7235, DSN 343.

Cold Chain Checklist

Here are the 10 most important things you can do to safeguard your vaccine supply.

- | Yes | No | |
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| ___ | ___ | 1. We have detailed written standard operating procedures for general and emergency vaccine management. |
| ___ | ___ | 2. We have a designated (and back-up) person in charge of the handling and storage of our vaccines. |
| ___ | ___ | 3. Our refrigerator for vaccines is either household-style or commercial-style, NOT dormitory-style. The freezer compartment has a separate exterior door. |
| ___ | ___ | 4. We store vaccines in the middle of the refrigerator or freezer, and NOT in the door. We do NOT store any food or drink in the refrigerator or freezer. |
| ___ | ___ | 5. We stock, rotate, and use our supply so that vaccine with the shortest expiration date is placed in front and used first. |
| ___ | ___ | 6. We post a sign on the refrigerator door showing which vaccines should be stored in the refrigerator and which should be stored in the freezer. |
| ___ | ___ | 7. We post a temperature log on the refrigerator door on which we record the refrigerator and freezer temperatures twice a day and we know whom to call if the temperatures go out of range. |
| ___ | ___ | 8. We keep a thermometer in the refrigerator and the temperature is maintained at 36 to 46°F (2 to 8°C). |
| ___ | ___ | 9. We keep a thermometer in the freezer and the temperature is maintained at -4 to 14°F (-20 to -10°C). |
| ___ | ___ | 10. In the event of a refrigerator failure, we take the following steps:
We place the vaccines in a location with adequate refrigeration, note the refrigerator and freezer temperature, mark exposed vaccines and separate them from undamaged vaccines, and contact USAMMA DOC to determine how to handle the affected vaccines. |